SOFTWARE VERSION 3.1

WWW.PRG.COM

PRG SERIES 400® TOOLS UTILITY

USER MANUAL

AutoPar®, Bad Boy®, PRG Series 400®, Mbox Extreme®, V676®, Virtuoso®, Virtuoso® DX, and Virtuoso® DX2,
are trademarks of Production Resource Group, LLC, registered in the U.S. and other countries.

All other brand names which may be mentioned in this manual are trademarks or registered trademarks of their respective companies.

This manual is for informational use only and is subject to change without notice. Please check www.prg.com for the latest version.
PRG assumes no responsibility or liability for any claims resulting from errors or inaccuracies that may appear in this manual.

PRG Series 400® Tools Utility User Manual

Version as of: October 14, 2010

PRG part number: 02.9680.0020.31

Production Resource Group
Dallas Office
8617 Ambassador Row, Suite 120
Dallas, Texas 75247
www.prg.com

PRG Series 400® Tools Utility User Manual
©2010 Production Resource Group, LLC. All Rights Reserved.

INTRODUCTION

About This Manual

This manual provides installation and operation instructions for the PRG Series 400® Tools Utility application. These instructions apply to S400Tools software version 3.1.

Familiarizing yourself with this information will help you get the most out of your PRG product.

Additional Documentation

For information on PRG Series 400® equipment, refer to the following PRG manuals:

+ PRG Series 400® Power and Data Distribution System User Manual (02.9680.0001)
+ PRG Series 400® 400 Amp Disconnect User Manual (02.9680.0200)
+ PRG Series 400® Ethernet Switch User Manual (02.9801.0001)
+ Virtuoso® Node Plus User Manual (02.9801.0301)
+ Virtuoso® Node User Manual (02.9669.0001)
+ PRG Lighting Systems Networking Guide (02.3004.1000.0)

For more information regarding DMX512 systems, refer to the DMX512/1990 & AMX 192 Standards publication available from United States Institute for Theatre Technology, Inc. (USITT).

USITT
6443 Ridings Road
Syracuse, NY 13206-1111 USA
1-800-93USITT
www.usitt.org

For more information regarding Art-Net protocol, refer to the specification for Art-Net II Ethernet Communication Standard available from Artistic Licence Ltd.

Artistic Licence (UK) Ltd (Registered Office)
24 Forward Drive, Christchurch Avenue,
Harrow, Middlesex, HA3 8NT, United Kingdom
+44 (0)20 88 63 45 15 (phone)
+44 (0)20 84 26 05 51 (fax)
www.artisticlicence.com

For additional documentation, please visit our support tech center at: www.prg.com/support

Customer Service

Our comprehensive technical services department ensures you get the full benefit of being a PRG customer. Whether your needs are simple or complex, our full-time staff of experienced professionals are on-hand to provide support. For assistance, contact your nearest PRG office:

PRG Dallas (International Service)
8617 Ambassador Row, Suite 120
Dallas, Texas 75247
Ph: 214.630.1963
Fx: 214.630.5867
Service Fx: 214.638.2125
Service Email: orders@prg.com

PRG Atlanta
1053 Willingham Dr.
Atlanta, Georgia 30344
Ph: 404.214.4800
Fx: 404.214.4801

PRG Chicago
90 Rawls Rd.
Des Plaines, Illinois 60018
Ph: 847.227.5171
Fx: 847.557.9033

PRG Las Vegas
6050 South Valley View Blvd.
Las Vegas, Nevada 89118
Ph: 702.942.4774
Fx: 702.942.4775

PRG Los Angeles
9111 Sunland Blvd.
Sun Valley, California 91352
Ph: 818.252.2600
Fx: 818.252.2620

PRG Nashville
8351 Eastgate Blvd.
Mount Juliet, Tennessee 37122
Ph: 615.834.3190
Fx: 615.834.3192

PRG New Jersey
7777 West Side Avenue
North Bergen, New Jersey 07047
Ph: 201.758.4000
Fx: 201.758.4312

PRG Orlando
1902 Cypress Lake Dr.
Orlando, Florida 32837
Phone: 407.855.8060
Fax: 407.855.8059

PRG Canada
2480 Tedlo Street
Mississauga, Ontario L5A 3V3 Canada
Ph: 905.270.9050
Fx: 905.270.2590

PRG Asia
Asagami Fukagawa Logistics Center B-4F
2-2-1 Shiohama, Koto-ku, Tokyo, Japan 135-0043
Ph: 81.3.5683.0011
Fx: 81.3.5683.0330

PRG Europe
The Cofton Centre
Grovely Lane
Longbridge, Birmingham
B31 4PT, England
Ph: +44 (0) 845.470.6400
Fx: +44 (0) 845.470.6401

Essential Lighting
Unit E
Imber Court Trading Estate
Orchard Lane
East Molesey, Surrey
KT8 0BY, England
Ph: +44 (0) 208.335.6000
Fx: +44 (0) 208.398.7205

For additional resources and documentation, please visit our website at: www.prg.com

OVERVIEW

About the S400Tools Utility

The S400Tools Utility is an application that can be run on any Macintosh® or Java-enabled Windows® computer. It is used for remote control, configuration, and monitoring of Series 400 systems. Features are as follows:

+ View and change active Source.
+ View live DMX512 data across universes and systems.
+ View modules currently online.
+ View, edit, and reset module configurations.
+ Load system software updates.
+ View network status.

Requirements:

+ Macintosh® or Java-enabled Windows® computer (Java version 1.5 or later)
+ CAT5e Ethernet Cable

Note: Refer to the Series 400 System User Manual (02.9680.0001) for complete Series 400 installation and operation instructions.

INSTALLATION

Installing the S400Tools Utility

The S400Tools Utility application can be run on any Macintosh® or Java-enabled Windows® computer. Note that some Windows computers may not have Java installed, so it may be necessary to install Java run time before using with a PC. Java run-times are available at: http://java.com/getjava/. (Macintosh computers should already be Java-enabled.)

S400Tools

To install S400 Tools Utility:

Step 1. Download or copy S400Tools application file to computer.

Step 2. Connect CAT5e Ethernet Cable from computer to Series 400 system.

Step 3. Configure network connection. The application looks for a port with an IP address in the pre-defined Series 400 subnet (10.66.x.x). Configure the IP address of the port to be used to an address in that range, such as 10.66.200.1, and the subnet mask to 255.255.0.0.

Step 4. At computer, locate S400Tools application icon. Double-click icon to launch program.

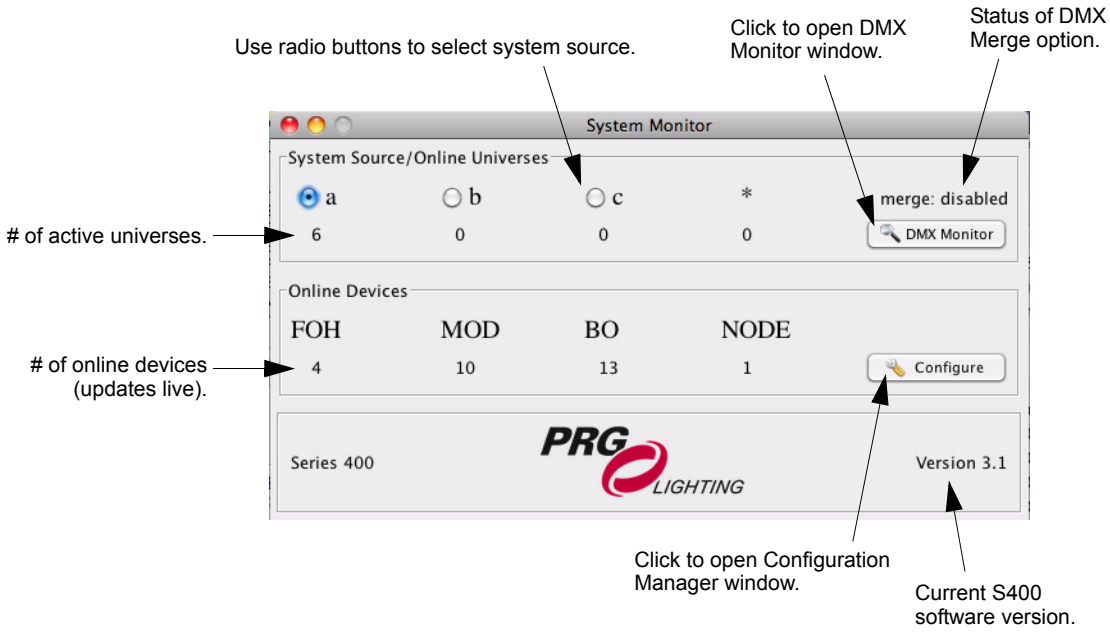
OPERATION

System Monitor Window

The System Monitor provides an overview of system source/online universes and online devices. The window also allows for selection of the system source universe: either a, b, or c. (* is always active).

Online devices are abbreviated as follows:

- FOH = Front of House
- MOD = Breaker Module
- BO = Breakout Box
- Node = Virtuoso® Node or Node Plus

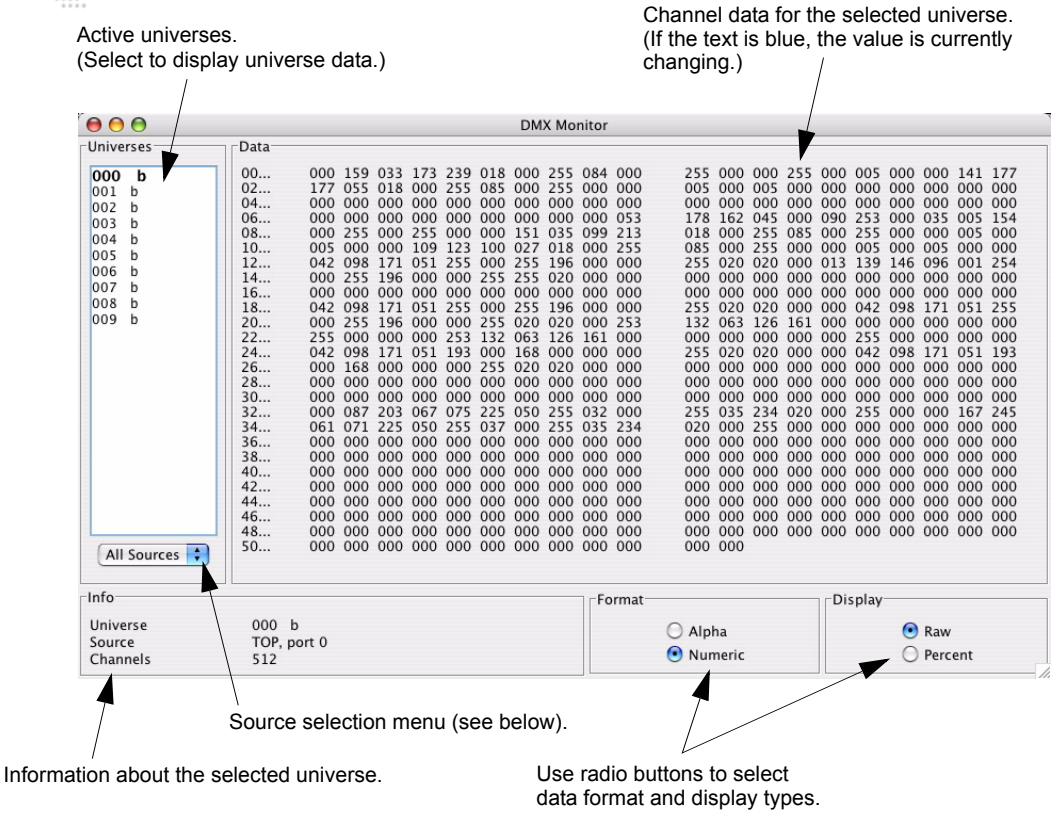


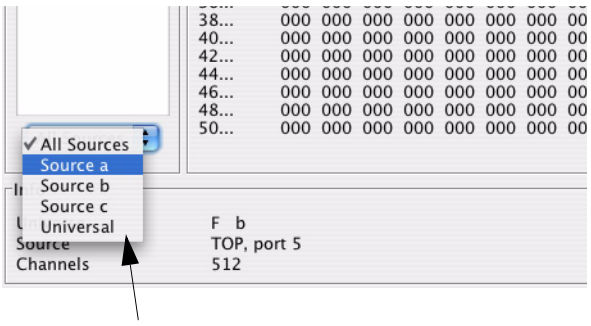
Note that if a system source change is made, a confirmation will be required:

DMX Monitor Window

The DMX Monitor provides live data for each online universe.

When a universe is selected, the window will display 512 bytes of universe data along with information about the source. The universe ID format may be set to either Alpha or Numeric, and the Display may be set to Raw or Percentage. Values that are changing will be highlighted in blue.





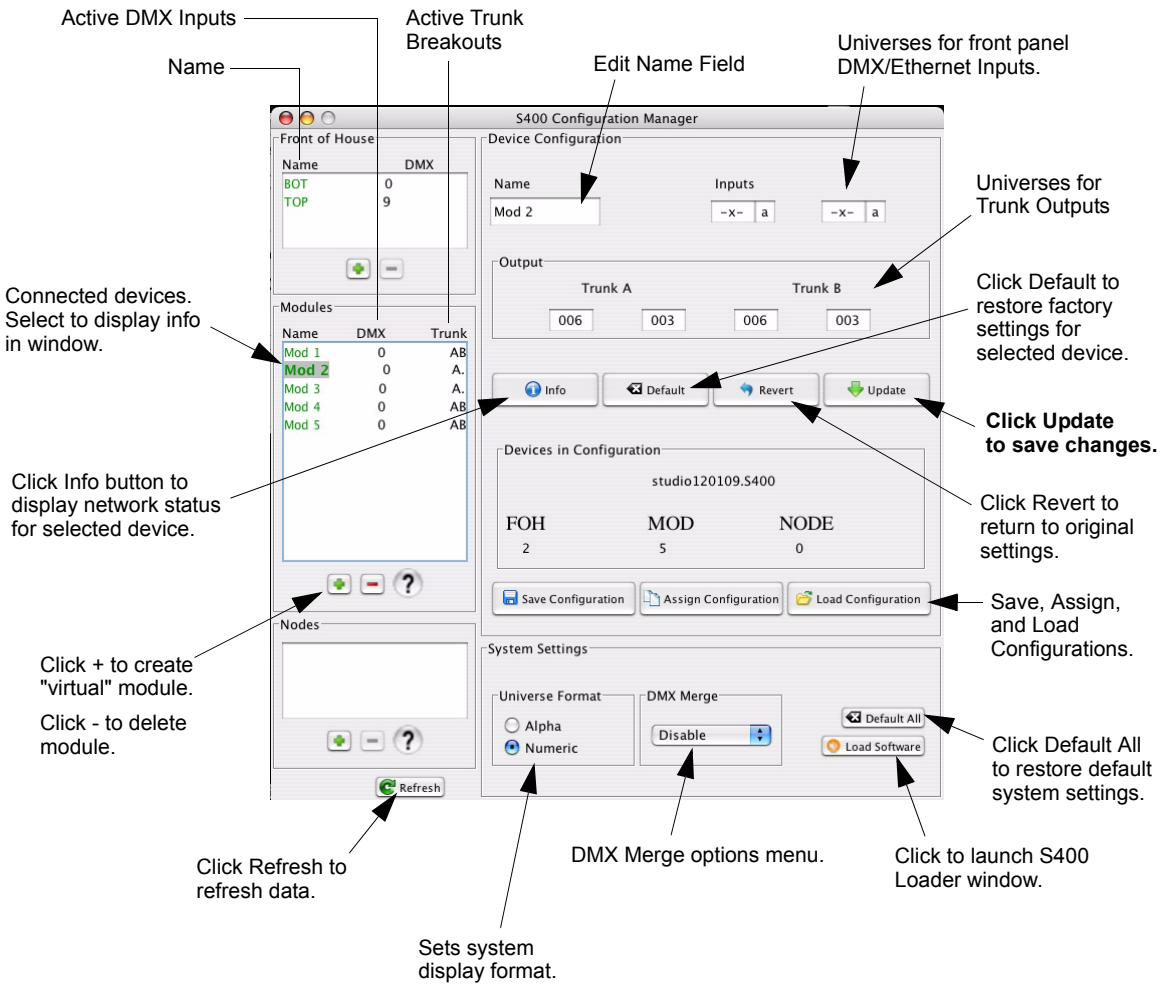
Configuration Manager

The Configuration Manager allows editing of device names, input and outputs, setting up and saving device configurations, initiating software updates, and configuring various system settings such as universe format and DMX Merge options. The device list updates automatically every few seconds, and can be refreshed explicitly with the button at the lower left.

Devices Column

Active FOH, module, and Node devices are displayed at the left side of the window. Select a device for editing by clicking on its name. Color coding is as follows:

- Green: online
- Red: offline
- Blue: not saved
- Gray: not assigned
- Yellow: needs software update

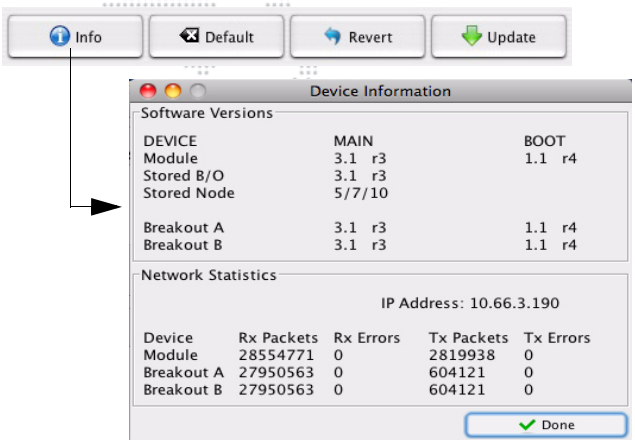


Device Configuration

This section displays the current configuration status for a device, and allows editing of the name, inputs, and outputs.

Button functions are as follows:

- **Update** - sends changes to the device.
- **Revert** - returns the device to its original settings.
- **Default** - resets the device to its factory default settings.
- **Info** - brings up the Device Information window.



Devices In Configuration

This section displays the number of devices stored in the configuration file. By storing a configuration file, it is possible to create a configuration before having an actual physical system. The configuration can then be assigned to real devices once a physical system is hooked up.

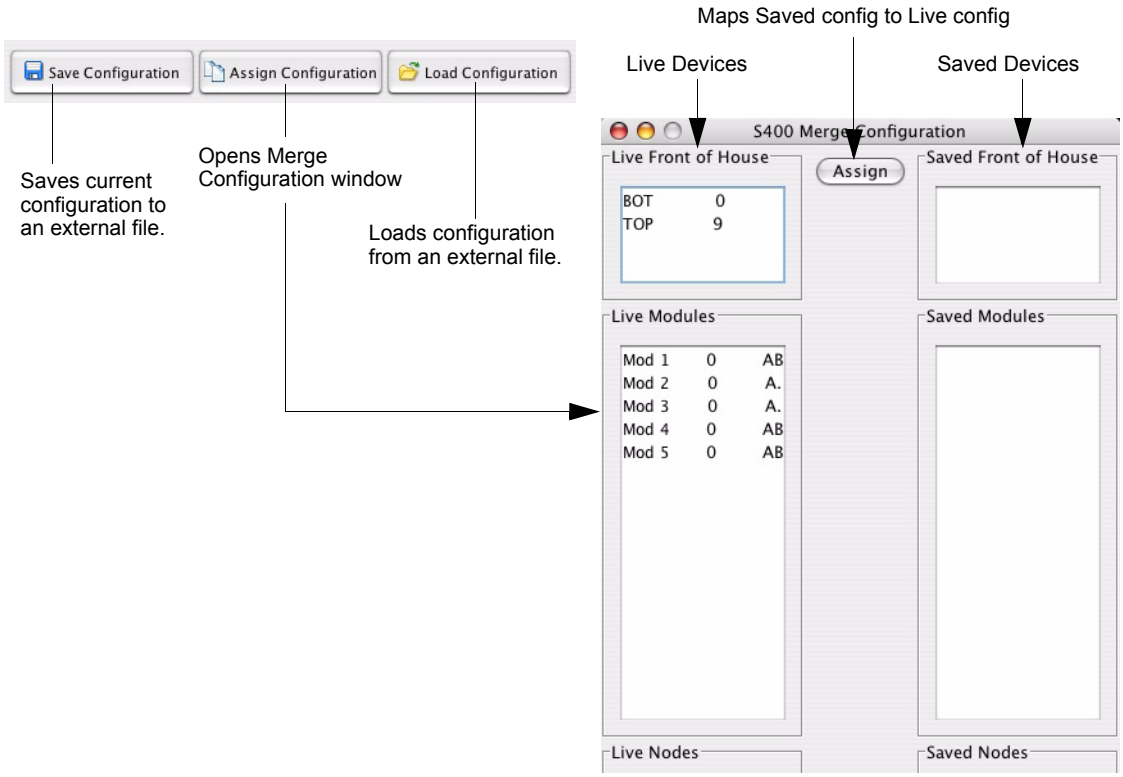
Button functions are as follows:

Click the Add (+) button to create a "virtual" module and then set its inputs and outputs.

Click Delete (-) button to delete a virtual module.

Configurations may be saved to external files using the **Save Configuration** button and imported using the **Load Configuration** button.

Pressing the **Assign Configuration** button will open the Merge Configuration window. In this window, the Live devices are shown on the left, while the Saved devices are shown on the right. Select one from each list and click the **Assign** button to map the Saved configuration to the Live configuration.



System Settings

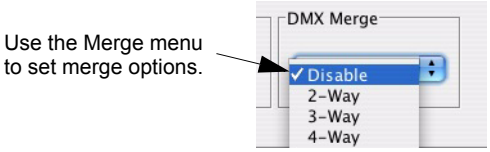
This section allows setting of the DMX universe format (alpha or numeric), selection of DMX Merge options, resetting all system defaults, and for initiating a software update.

The **Default All** button will reset all system devices to their factory settings. *This action will require a confirmation, and should only be done for shop prep or initial start-up!*

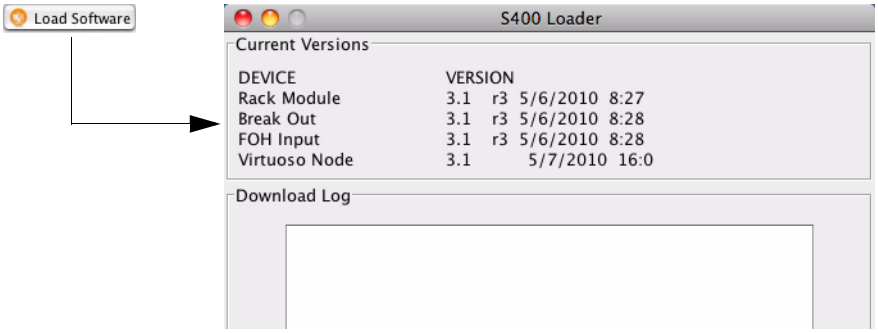
DMX Merge allows merging of DMX512 data for multiple universes assigned to the same number. For example, if two inputs are set to 001a and 2-way merge is enabled, then the resulting output for outputs set to universe 001 would be the highest value for each channel between the two inputs (HTP). If three inputs are active at 001, the outputs would be disabled.

Options are as follows:

- Disable: no DMX universe merging.
- 2-Way: allows up to 2 DMX universe inputs per universe.
- 3-Way: allows up to 3 DMX universe inputs per universe.
- 4-Way: allows up to 4 DMX universe inputs per universe.



The **S400 Loader** can be opened by clicking the **Load Software** button. This window can be used to view current software versions for all online devices and to initiate a system-wide software update. By clicking the **Start Download** button, all device software versions will be updated sequentially. Devices that already have the current version will not be affected. Progress of the update will be shown via the text display and the progress bar. Click **Done** when complete.



Note: Unlike older versions of S400 software, v3.0 and greater allow software update for all devices in a single step (instead of updating devices one-by-one).

Notes

PRG Series 400® Tools Utility User Manual

Version as of: October 14, 2010

PRG part number: 02.9680.0020.31

Production Resource Group
Dallas Office
8617 Ambassador Row, Suite 120
Dallas, Texas 75247
www.prg.com